



# COLMAN'S RURAL WORLD.

DEVOTED TO AGRICULTURE, HORTICULTURE, HORSES, CATTLE, SHEEP, SWINE, ETC.

ESTABLISHED 1848

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## COLMAN'S RURAL WORLD.

NORMAN J. COLMAN, EDITOR.  
LEVI CHUBBUCK, ASSISTANT EDITOR.

Published every Wednesday, in Chemical building, corner of Eighth and Olive streets, St. Louis, Mo., at one dollar per year. Eastern office, Chalmers D. Colman, 820 Temple Court, New York City. Advertisers will find the RURAL WORLD the best advertising medium of its class in the United States. Address all letters to COLMAN'S RURAL WORLD, Chemical Building, St. Louis, Mo.

While the RURAL WORLD is published at one dollar a year, it has temporarily allowed old subscribers to send actually NEW OR TRIAL subscribers with their own subscriptions at fifty cents a year, in order to largely increase the circulation and influence of the paper. This price is less than the cost of the white paper, presswork, folding, wrapping, mailing and preparing the postage, saying nothing of any other of the large expenses of maintaining offices, paying salaries and conducting such a paper in a large city. Renewals, unless accompanied by one or more NEW subscribers, must be at one dollar a year. All names are dropped as soon as subscriptions expire. The month named on the address tag, pasted on each issue, shows the month subscriptions expire, and renewals should be made two or three weeks before, so that names shall not drop out of list. It is gratifying to the proprietor to be able to state, in his half century's experience in conducting this paper, it has never enjoyed the patronage and prosperity it now does. Its circulation is increasing in a wonderful degree, and its advertising patrons, many of whom have used its columns for a quarter or a third of a century, are more than pleased with results. Let all our friends unite and press forward in extending its sphere of influence. It will do for others what it is doing for you, so get others to join the great RURAL WORLD army and receive the same benefit.

Mr. Leigh Richmond Freeman, editor "Northwest Farm and Home," of Seattle and Portland, Oregon, called at the RURAL WORLD office while in St. Louis last week. We were pleased to shake hands with our editorial brother from the Pacific coast, and to commend him and his paper to our readers in that wonderful Northwest.

### GET A RIGHT START.

We present on this page an article on Agriculture in the Rural Schools, by Secretary Geo. B. Ellis, of the Missouri Board of Agriculture, and published in the June Bulletin of the Board. We have called attention in previous issues of the RURAL WORLD to the interest that the State Department of Education, the State Agricultural College and the State Board of Agriculture were taking in this matter of introducing the study of the elements of agriculture into our rural schools, and we are more than pleased to publish the fact that the work is under way, and to claim for Missouri the honor of being in the fore front of a movement that promises the most happy results.

It has taken years of agitation and discussion to develop a public sentiment that would permit this line of work in the public schools, and even yet there is prejudice and wrong conceptions to overcome, as Secretary Ellis points out. And if the Secretary will accept a kindly criticism, let us say that, to our mind, a portion of the prejudice is due to a wrong conception of what the proposed work should consist of and which is indicated in the expression "the teaching of agriculture or horticulture," or, as it is more frequently put, "the teaching of agriculture and horticulture." We contend that the advocates of this line of work should limit the expression to "the teaching of agriculture," that is, the principles of agriculture, and attach to the word "agriculture" its broad significance. When the expression "agriculture and horticulture" is used, it is inevitable that the mind will attach a technical significance to the words and conceive that in teaching the children agriculture they are to be taught methods of corn and wheat culture, and in horticulture, how to bud, graft and grow Ben Davis apples.

Then it naturally that instruction must be given in dairying, that is, in breeding and selecting a dairy cow, how to milk, make butter, etc.; also in pig feeding, poultry raising, bee keeping and so on until we are all at sea and swamped.

All that is, of course, impractical, and the public mind must be kept clear of any such notion. The subject to be taught is agriculture, and under that head will come the study of soils, the guide to which Prof. Smith is to prepare; the Study of Plants, to be prepared by Prof. Thom, and Study of Insects, by Prof. Stedman. Information given to the chil-



QUADRIGA UPON THE UNITED STATES BUILDING, PAN-AMERICAN EXPOSITION.

This group, by F. Wellington Ruckstuhl, surmounts the dome of the U. S. Government Building, and is visible from a far distant point. The group of horses is driven by the charioteer expresses much life. The work was done originally for the U. S. Government Building at the recent Paris Exposition.

### GOVERNMENT IRRIGATION WORKS.

In the matter of irrigation works, to which Mr. Gillespie refers on this page, and regarding which there is a good deal of agitation for congressional aid, there is danger of going too far and the government work become of a paternal character. Unquestionably there are vast regions in the western half of the country that can be made of value agriculturally by means of irrigation. Probably there the Government is in duty bound to undertake the work. But it is being suggested in some quarters that the Government could, with much advantage to individual farmers, extend irrigation works into the regions where irrigating, though not essential, is more or less beneficial to and insuring crop yields.

Suppose it were feasible for the Government to extend irrigation works throughout the country and that these would do all that is claimed, render the farmer independent of the lack of rainfall, and insure him good crops. Does anyone who has ever studied human nature believe that it would be to his advantage as a man? Human nature is weak and very few of us are going to work any harder than necessity says we must. It is necessary that spurs us on and gets out of some of us a portion of what we are capable. If the Government makes it easier for us to fight the battle of life, we are very apt to accept the service as a matter of course and ask the Government to put in a few more licks for us. In the interest of a strong, virile, independent citizenship, we deprecate paternalism, and that is what there is danger of such schemes as extensive irrigation works degenerating into.

What is needed more than government irrigation works is that the farmer be taught how they, by the use of the inherent but trained forces within them, mental and physical, and the application of knowledge to their business, can become co-workers with Nature. We remember a year in our boyhood days when a drought extended from before corn was planted until after the crop was put in the shock. In many instances the crop was fair. "Ah, yes," some will say when that season and its crops are referred to, "but the soil was new and fresh." No, it was old. For cycles of centuries Nature had been producing annual crops on that land, and turned it over to American farmers (who we pride ourselves in saying are the most intelligent in the world), and in two decades of years a two weeks' drought meant injury to the crops, and one of twice that length meant crop failure.

Any manufacturer who can furnish such a thresher as I have indicated, and would let it be known in the south, I am confident would be surprised at the demand. W. S. THOMAS.

### FOREST TREE PLANTING.

Editor RURAL WORLD: The Forestry Division of the Department of Agriculture has issued quite recently a circular, which is designed to awaken an interest in a cause so momentous to the dwellers on treeless wind-swept plains, but also so sadly ignored by those tillers. The Division offers practical assistance to planters, as far as giving reliable information on the choice of best varieties, and the most intelligent mode of planting and cultivation that can be imparted by its agents. Their services to the prairie farmer are offered free of charge, outside of the payment of traveling and hotel expenses. Turkish baths and a fair allowance of ice cream of course included.

The circular deserves the widest possible dissemination throughout the country. It indicates a fundamental stepping-stone to a rational system of forest culture to be inaugurated in the fullness of time by the people and for the people, the benefits of the returns of which, if once fairly in vogue and dominated by American enterprise and intelligence can not be computed in figures or in imagination.

This timely appeal to western farmers, landowners and corporations reminds the writer quite pleasantly of a circular note addressed to the institutions of higher education, issued by the Forestry Division of the Department of Agriculture, during the administration of the Hon. Norman J. Colman, when as United States Secretary of Agriculture he invited the attention of leaders and controllers of the universities and colleges of the land to the results accruing from a practical and rational system of improvement of the widespread areas of ground surrounding these institutions of education. He offered the assistance of the Division in designing the grounds to be improved and in giving direction to the work, both practical and artistic, to any college wishing to civilize its surrounding grounds. Responses received from various leading educators demonstrated quite forcibly the interest felt in so progressive an educational departure. It was only the intervening change of administration that check-mated the far-seeing suggestion; yet truth crushed to earth will rise again. How many beautiful and instructive groves of useful and ornamental trees might have in the meantime grown up around the stately halls of science, while the faculties were asleep and professors of botany and horticulture manipulated their microscopes and spraying devices!

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Pulaski Co., Ark.

### LACLEDE COUNTY, MO.

The dry hot weather and the chinches are getting in their work. Our meadows are not more than 15 to 20 per cent of a crop. Our wheat, what there is of it, quality is extra good; the yield is 30 to 40 per cent less than an average crop. I have in about 35 acres of oats, and I will not cut or attempt to cut over 15 acres. In many cases oats are so short that they cannot be cut with a mower. Corn is well worked, all of it three to five times, but unless we get rain soon it will be as short a crop as wheat, oats and grass are. Cisterns and stock ponds are going dry rapidly. Pastures are bare and many farmers will turn stock on oak fields and meadows. Apples and peaches have stood it the best of any crops, especially where orchards have been well cultivated. How much longer they can stand it is a problem. I have lived here 12 years, and never have we had so dry a May and June as this has been.

The study of this great basic lesson should begin in childhood and in our lesson times; one-half inch of rain on the 16th. A high dry wind is fast draining the soil of the little moisture that is left. We shall be fortunate if we do not have hot winds soon. Corn continues to grow and looks well. The most of our farmers continue to stir their corn ground weekly, which is the best thing to do. Oats are very short and being mowed for hay. Wheat is all cut and some of it stacked. Prairie meadows are very short. And red top meadows are short and thin. Apples, peaches, plums, etc., are not developing as they ought. C. A. BIRD.

June 24.

A. NELSON.

### PEBBLES FROM THE POTOMAC.

Editor RURAL WORLD: A map unique in its characteristics is being prepared by the Government that promises to be of benefit to the farmer. It will be a map of the soil, which will be the work of agricultural experts. The object in view is to chart the whole country with reference to suitability of soil for various crops, thereby doing away with guess-work as to what particular crop is adapted to particular soil and locality. This map will be printed in colors, and will be plain so that no difficulty will be experienced in comprehending the information sought to be conveyed. The entire map will be on such a scale that every ten-acre patch will be represented by one-eighth of an inch square. A large chart of each neighborhood can be procured by a farmer, with the object in view that he can arrange his planting in accordance. The work is done by townships, which put together form counties, and eventually the entire State is charted. It is expected that by this system the farmer can eliminate the element of guesswork, as formerly he arrived at results from experiments. With the chart he will receive advice based on the highest scientific knowledge, as what is the best crop to put in to get the greatest results. The soil map will show what kind of agricultural industry any given locality is best adapted for—whether fruit raising, vegetable growing, dairying or general farming. Thus it will be seen that similar soils in different localities, where the climate is similar, can be used advantageously for like crops. The map will deal with certain troubles of soils, which have been investigated through chemical analysis, and will be replete with valuable suggestions remedying the evils. The map promises to be of real value, and is in keeping with the advancement of the magnificent agricultural development of the day.

IRRIGATION.—Prof. Meade, of the Agricultural Department, in his testimony before the Industrial Commission a few days ago, said that irrigation is necessary in two-fifths of the area of the United States to make farming profitable. He did not consider it a sectional question, and pointed, as an example, that in the past few years irrigation had redeemed Louisiana and Texas an area larger than some New England states, causing an increase in the value of land to a considerable extent. Prof. Mead says irrigation is necessary in so progressive a developmental department. It was only the intervening change of administration that check-mated the far-seeing suggestion; yet truth crushed to earth will rise again. How many beautiful and instructive groves of useful and ornamental trees might have in the meantime grown up around the stately halls of science, while the faculties were asleep and professors of botany and horticulture manipulated their microscopes and spraying devices!

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W. S. THOMAS.

# The Dairy.

## TO ABOLISH THE OFFICE.

Of City Milk Inspector.

The St. Louis Health Commissioner, Dr. Starkloff, has advised the city Municipal Assembly to save the money that is usually expended in maintaining the office of Milk Inspector, on the ground that the office as conducted under existing laws is of no value to the public. That the office is of little or no value to the St. Louis consumers of milk we are well aware; not that the consumers are not in need of the service of a Milk Inspector, but simply that lack of law or proper enforcement of what does exist, the consumers of milk in St. Louis have practically no protection through the office of Milk Inspector from fraudulent or even criminal practices on the part of milk dealers. In proof of the fact that there exists a great need for such protection, we present the following which appears in Volume VI. of the Report of the Industrial Commission on the Distribution of Farm Products on

**THE MILK TRADE OF ST. LOUIS.**

Assuming that the census now being taken will show that St. Louis has a population of 600,000, the daily per capita consumption of milk in this city is two-thirds of a pint, or a total of 30,126 gallons. Of this quantity 12,000 gallons are "railroad" milk, the remainder being brought into the city by wagons from territory adjacent to the city, or produced from dairies located within the city limits. In these latter there are about 8,000 cows that are kept for commercial milk purposes.

**CITY DAIRIES.**—As affecting the milk supply of St. Louis the city dairies are a very important factor. As already stated, the larger part of the city's milk supply is produced in these dairies that are located within the city limits, many of which are in densely populated districts. The condition is one which probably can not be found to exist in another city of equal population in the world.

The basis of the city dairy business is the offal from the extensive breweries and distilleries located here, the spent grain from these being utilized for food for the cows. This refuse from the breweries comprises, in the majority of cases, a large proportion of the food given the cows. No attempt is made by the breweries to rid this waste product that is disposed of locally of any of its moisture, which comprises 75 per cent of the total waste, and it is fed by the dairymen generally in the form of slop or a semiliquid condition from water-tight mangers, and often constitutes the cow's sole ration of food and drink. As might be expected, the food, being in a warm and fermenting condition when obtained from the breweries, becomes quite sour before it is consumed by the cows, and the cow mangers and the entire premises reek with germs of fermentation.

The cows are, for the most part, kept in very contracted quarters, in many instances confined in pairs in such narrow stalls that only one can lie down at a time, and are kept there from the time they become members of the herd until they die in the stalls or are sent to the shambles. After a cow gets used to the lack of exercise, the liquid fermenting food, and moist hot atmosphere, it is said that she takes on flesh and gives a good flow of milk. Whether the flesh and milk are such as will make wholesome food is a question for consideration by the city health department. We have to consider just now the effect of this system on the city milk supply as a whole.

Unquestionably the enormous output of spent malt from the extensive brewery interests in this city is the most potent factor of all affecting the St. Louis milk supply.

Fed under proper conditions and in combination with other foods, spent malt is a valuable dairy food. It is rich in nutritive elements needed to induce a good flow of milk, and it is much relished by cows. Even in the wet state it may form a part of the cow's ration with good advantage, if fed fresh and under conditions which will not induce fermentation in the cow stables. But these conditions are practically never obtained in the city dairies. Unless the spent malt is dried, the excess of water makes the weight such that it is out of the question to transport it by rail to the dairy districts. The dried grain is highly regarded as a dairy food. It can be and is exported from this city to Europe for feeding purposes.

Only two of the breweries in this city make any effort to dry this spent malt. The dried grain commands a price of about \$2 per ton f. o. b. St. Louis. At this price it is a cheaper food than oats, wheat, bran, corn, or other food stuffs in common use at prevailing prices.

But the wet grain is sold to local dairymen at such a price that a quantity sufficient to make a ton of the dried grain costs about \$5.00. Thus it is apparent that the city dairymen has the advantage of a very cheap cow feed.

There are about 450 dairymen in the city. What it costs them to produce a gallon of milk it has been impossible to accurately ascertain. Estimates, however, fix the cost at 10 cents per gallon, and the average selling price of the city produced milk is 20 cents per gallon.

The producers and handlers of country milk can not compete with these prices, and can only find customers for their produce among that portion of the city's population that is willing to pay a larger price for goods of superior merit. The milk business is divided, therefore, quite distinctly into two divisions. The one includes the city, or "swill" dairy, as it is called, and in the other the "railroad" milk, or that produced on farms and brought into the city by rail. A comparatively small quantity of milk, but of good quality, is produced on farms close to the city and brought in by wagons. This may properly be regarded as railroad milk, at least in respect to quality.

When the butter granules have reached the right size the buttermilk should be drained off, and the butter thoroughly washed with pure, clean water at a temperature of 50 to 60 degrees F. This should be continued until the water coming from the butter ceases to have a milk appearance.

**Calf Scours.**—Hood Farm Calf Scour Cure and Cured Digestive Powder do the work. Several cases cured

Each Remedy, \$1; large (four times dollar size) \$2.50. Sent to any railroad express point in U. S. \$2 extra. C. L. HOOD & CO., Lowell, Mass.

## CREAMERY BUTTER

At the Pan-American Exposition.

In the June 15 issue of the "Chicago Produce" we find the following with reference to the May butter contest at the Pan-American Exposition:

"From the list in hand it appears that an entry from Hoard's Whitney Factory, Fort Atkinson, Wis., won sweepstakes over all entries with a score of 97.75. However, these figures are unfortunately blurred and therefore may not be correctly read. Wisconsin also secured fifth place, Wm. M. Van Lier, Woodworth, scoring 96. New York takes second and fourth place with scores as follows: W. E. Hitchcock, Savannah, 97, and Rosemary creamery, Adams, 96.25. Third place was won for Ohio by Benj. M. Rutan, Maryville, score 96.75. Honors of sixth place are divided by Cornish Creamery Co., Cornish Flat, New Hampshire, and W. J. Harrison, Boston, Mass., each scoring 95.50. Minnesota takes seventh place, Lewis Lawrence of Sundown scoring 95.25, and divides honors of ninth place with Iowa on score of 94.75 won by C. J. Bang, Blaine, Minn., and Peter Peterson, Elkhorn, Ia. Eighth position goes to Connecticut on score of 95 won by F. L. Ives, Goshen, and Michigan secures tenth place on score of 94.50 won by H. A. Shellenberger, Chesterfield.

The states sending creamery butter and number of entries are as follows: New York, 22; New Hampshire, 22; Wisconsin, 21; Minnesota, 19; Ohio, 10; Connecticut, 9; Missouri, 6; Iowa, 5; Michigan, 5; Massachusetts, 5; North Dakota, 2; Pennsylvania, 2, and Vermont 1—total 130. The Guelph dairy school, Canada, sent three entries scoring, respectively, as follows: 93.5, 95.75 and 96.

The next contest at the Pan-American will take place July 10, and a more representative exhibit is looked for both as to quality and number of exhibits."

We have no information as to what Missouri is doing in the dairy line at the Exposition other than as stated in the foregoing, that there were six entries of creamery butter from this state.

Since the foregoing was put in type, we find in the "New York Produce Review" of June 19, the official list of exhibitors and scores, and from which we learn that the highest score on butter, 97, was made by a New York entry, W. E. Hitchcock, Savannah, N. Y.; the next highest being 99% on the entry of Benj. M. Rutan, Montpelier, Ohio, while New York captured the third place with a score of 96%, and had two entries that were scored 96%. Wisconsin's highest score was 96. New York and Connecticut each had entries that scored 95%. Wisconsin and New Hampshire got a 95% score, and in the 95% class New York had two entries, Minnesota and Connecticut one each. In the 95% class New York had three entries, Wisconsin and Connecticut two, New Hampshire and Missouri one each.

Nine states were represented with numbers of entries as follows: New York, 46; New Hampshire, 40; Wisconsin, 21; Connecticut, 20; Minnesota, 19; Missouri, 14; Ohio, 11; Michigan, 8, and Massachusetts, 2.

Missouri and Minnesota are the only states west of the Mississippi that were represented. Minnesota, which ranks as one of the great dairy states, had five more entries than Missouri, and her highest score was one-fourth of a point higher than Missouri's highest.

Missouri is the only state in the list that had more dairy than creamery entries. The state's entries and scores are as follows:

**MISSOURI.**

**CREAMERY BUTTER.**

St. Louis Creamery Co., St. Louis, 91½

Corder Creamery Co., Corder, 92½

Garden City Creamery Co., Garden City, 93½

J. S. Smith, Springfield, 93½

Corder Creamery Co., Corder, 93½

St. Louis Creamery Co., St. Louis, 92½

**DAIRY BUTTER.**

L. E. Shattuck, St. Paul, 95

Mrs. Wm. H. Hatch, Hannibal, 92½

Nathan King, Deer Park, 92

Nathan King, Deer Park, 92½

Mrs. W. H. Hatch, St. Paul, 91½

John Patterson, Kirkville, 91½

H. C. Goodrich, Calhoun, 92½

Missouri made a creditable showing comparatively, yet nowhere near as good in number of entries as could have been secured with proper effort. The scores, considering the time of the year, speak well for Missouri dairymen, and show what can be done in this state with proper encouragement, and what may be expected in 1901 at St. Louis.

**THE DAIRYMEN'S IDEAL.**

**EDITOR RURAL WORLD:** The system of dairying from the securing of the calf to the placing of the product upon the consumer's table has undergone vast improvements within the last 30 or 40 years, and we predict that the end is not yet.

When we take into consideration the hazard method of breeding, the valuing of all milk as cow's milk whether rich or poor in butter fat, the estimating of the temperature of the cream by the hand, determining the ripeness of the cream by licking the finger after drawing it through the cream, etc., all of which so long prevailed on dairy farms, to say nothing of the other departments connected with dairying, we are surprised at the rapid advance made in so short a time. The new methods of dairying lessen the labor and give the farmer the regular monthly returns.

The consumer looks to the creamery for his regular supply of butter of a desirable quality. Hence the creamery has gained its good name, while the so styled farm butter has lost prestige. This result suits home-made butter is not as good as it should be. We see no reason why, with the advanced system of manipulation that the farm-made butter should not excel a creamery make. Among private dairymen there are cases that prove that a superior quality of butter can be made.

If one man can, why not another? Undoubtedly all of us have not the capability or the natural conditions essential to reach the top-notch in dairying, but assuredly the majority can make great improvement.

The deep-setting system was an improvement over the shallow pan and the use of the separator is an improvement over the deep-setting. The same is true of the neat, creamy pound print when compared with the old-fashioned roll of all weights.

Labor saving devices have been invented for all lines of industry, and these enable products to be placed on the markets of the world with a less expenditure of time and energy; and the dairy industry has had its full quota of useful apparatus. These contrivances are being forced upon the attention of dairymen.

The inventors have had an ideal in view, and by persistence have accomplished their purpose.

The mechanical inventor stops not un-

till he sees the successful accomplishment of his design. Why does not the farmer arouse his half-dormant brain, and set his ideal so high that nothing short of the highest yield per acre, the best stock, and the products of the highest standard from his cows will satisfy his ambition? The results undoubtedly will reward his endeavors, and create a demand for his product. In the ideal dairy butter will be put in pound prints. The man who desires to have a model dairy will study the cow and the calf, will strive to have the best milk, which will make the best butter, which will secure for him the best price. He will give the cow the best care and feed and will wisely manage the out-

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# Horticulture.

## THE PLUM CURCULIO.

It is probable that the insect that caused Mr. Geer's plums to fail is the Curculio (*Conotrachelus nenuphar*), which works on the growing fruit up to the time the stones harden. Mr. Geer stopped the jarring too soon, and he says nothing about making any effort to catch the insects that should be shaken from the trees by jarring. A sheet should have been spread under the tree when it was being jarred; the curculios would then fallen on this and they could have been destroyed; otherwise they will soon take wings and be again actively at work on the plums.

The principal injury to the plum and to other fruits more or less by curculios is caused by the female in making a puncture in which to lay an egg, this soon hatching into a worm that eats its way into the fruit, causing it to decay and fall from the tree. The worm then emerges from the fruit, enters the ground and there goes through the changes into the perfect beetle this season or next.

It is obvious from this that one way to protect the crops of subsequent seasons is to have all fallen fruit picked up and destroyed before the worms can emerge and enter the ground. Poultry and hogs if kept under the trees, will assist in this work, but their work will have its good effect on next year's crop rather than on the present one.

Orchards that are surrounded by woodland will be more troubled by curculios because the timber affords the curculios good opportunities for hibernating during the winter.

For a few trees, protection by jarring is the most efficient if properly done. In adopting this means advantage is taken of the habit of this class of insects when disturbed to "play possum." A sudden jarring of limb on which a curculio is at work will cause it to fold its legs and snout, let go and fall to the ground. And if a white cloth be spread under the tree the beetles will fall upon this and can then be gathered up and destroyed; otherwise, as stated, they will soon be back in the trees as busy as ever, and as each female will deposit from 150 to 200 eggs in a season, it is important that she be prevented from continuing her work.

To aid in the jarring, and at the same time prevent injury to the tree by bruising, a small limb should be sawed off square, leaving a stub three or four inches long. Striking on the end of this stub with a heavy wooden mallet will do the jarring and not do any bruising of the bark of the tree. The jarring should be done in the cool of the morning, when the beetles are sluggish.

It used to be assumed that spraying was of no avail for curculios, but experience has shown that spraying with arsenites, Paris green, etc., is measurably effective and for large plantations should be adopted.

## HORTICULTURAL TALKS.

**SUMMER LAYERING OF GRAPE VINES WITH YOUNG WOOD.**—This method will be of no use where the ground is as dry as it is here. To do this the canes to be layered should have been laid down and kept straight as they grew. When a cane has grown, say six feet, pinch the end off. This will give the laterals a fresh start. When these have grown six inches lay the vine in a little furrow deep, pinching or cutting off the tendrils. If the variety is a short-jointed one, cut out every alternate lateral. Lay the cane down so it will lay flat. Pinch off the lower leaves, except the largest one that starts at the base, and cover with fine earth, pressing it firmly. In a week or ten days set a little stake by each shoot, fill up the furrow level with the surface and mulch. Ordinary varieties will make good plants by fall; but such as the Norton, Delaware, etc., are difficult to root. But as I said before, there is no use in trying this method in a dry season, unless one can water well.

One asks what I call watering a lot of plants well. A two and a half gallon can full of water will give a square yard a pretty fair dose. If the ground is mellowed on the surface as soon as dried off a little, it will last for two weeks. Here the cistern is low and the spring is 40 rods off. This morning I have carried at least a barrel of water to keep a lot of budding plants from suffering. They are not mine, but the ones to whom they belong cannot water them.

**THAT PLUM PAPER.**—It seems that my paper on plums read at our late meeting is being commented upon as not having been quite the proper thing. Well, all have a right to comment upon it as they see fit. I simply stated facts and my experiences. Should I attempt to doctor it up, I would likely make it worse. I will not take offense at any criticism on the subject.

**RUDBECKIA (GOLDEN GLOW).**—For three years I have tried to grow this popular flower, but it seems sure to fail the third time. On examining the plant, I found a worm in the stem about three inches from the top. The top is dead down to the worm. It is similar to the worm found in the canes of raspberries. This happened to another plant that I gave my daughter. Hers is entirely killed, while mine may recover. Had I known of this enemy a little slug shot might have saved the plant. While the birds are protected here, the insects still seem to hold the fort. What would the result be if the birds were driven off or killed, as in many places? We have some of the sweetest singers in the land. The wood thrush, sometimes, I believe, called the hermit, sings so near us that it makes one feel happy. This bird is almost domesticated here.

**A SERIOUS OUTLOOK.**—There has been scarcely any rain for six weeks. The strawberry crop was greatly curtailed; the raspberry crop is threatened and the blackberry will share the same fate. I was told by one man that his loss on the strawberry crop for want of rain was more than \$1,000. Mine was not so great by hundreds of dollars, but I think the crop was only about one-half what it might have been. It would have been much less if we had not hauled barrels and barrels of water. The fact is simply this, that unless we can irrigate in dry seasons, the success of the strawberry is by no means certain. But two fruits seem to stand the drouth, the peaches and grapes. They never looked better than now.

**WOODMAN SPARE THAT TREE.**—How often should this good advice be given? Quite a number of valuable trees on my place were left with the expectation that they would make something good. Just now I have a mulberry tree

that was grafted when small with a new white one that was considered worth growing. It grew and bore fruit that did not suit me. It was cut down and a post or two made out of the trunk. A shoot came out of the original root, and it is now twelve feet high. It has a beautiful top, bearing the largest mulberries on my place, and of good quality. From four pretty fair sized trees we can scarcely get enough to eat. The birds even dispute our right to any. A little account of our birds that please the young people, may soon be given.

**HAMMOND'S SLUG SHOT.**—Where can I get it? is asked. From any seed or agricultural implement store. To use it, dust any plants infested with insects, and it will drive and keep them off. One pound in five gallons of water and sprayed on will also answer the purpose. If you wish to be prepared to fight insects on every line, send for Hammond's catalog, which will give you all the information you want. His advertisement is in the RURAL WORLD. Ben Hammond, Fishkill, on the Hudson, N. Y., is the address. I am never without this Slug Shot on hand.

**PALATINE RESIDENCES.**—I often wonder why some rich St. Louisans don't secure some of the grand situations on these bluffs—views almost unsurpassed, pure air and superior fruit locations. There are two such on the M. K. & T. Railroad near Bluffton, within a 15-minutes' walk from the station, that I would own if I were not so old and where I would spend my last days, above the fog and malaria of the Missouri River. I am no land dealer, but if any of the RURAL WORLD readers wish information or to be shown around, I am at their service. SAMUEL MILLER.

Bluffton, Mo.

## THE SUMMER MEETING

Of the Missouri Horticultural Society.

(Continued from last issue.)

The program for Wednesday night's session was interspersed with music and recitations that added interest to the occasion, which was much enjoyed by the audience that packed the hall. One of the notable features of the program was the recitation by the young daughter of D. A. Robnett. It was given in costume, and was an old lady's protest against spitting tobacco juice on her floors. The recitation was thoroughly enjoyed by the audience, and none more so than Major Evans, to whom fell the part of representing the old lady's tobacco chewing husband.

The "Bridge Builder" was exceptionally well rendered by one of the young lady teachers in the New Haven schools. The piano solo and the zither solo were both very pleasing. Secretary Goodman read a sketch of "Johnnie Applesseed," that strange character who years ago in the pioneer days did so much to get apple orchards planted in what was then the Western wilderness.

**"PRINCIPLES OF FORESTING."** was the title of a good paper by Miss E. J. Park of Green Co., Mo. We will have the pleasure of presenting this paper to our readers in an early issue of the RURAL WORLD.

Mr. H. C. Irish of the Missouri Botanical (Shaw's) Garden, St. Louis, discussed the subject of Foresting from a somewhat different standpoint. We hope to be able to publish his remarks.

Miss Goodman read the paper written by F. W. Closs of St. Louis County, which was awarded the first prize in the contest between students in Horticulture at the Agricultural College. The subject of the paper was Orcharding. The prize, which was in cash, was put by Mr. Closs into nursery stock, and planted in an orchard. Mr. C. is to keep an account with this orchard and so determine how much his prize money was worth to him as an investment when handled in accord with the instructions given him.

Thursday morning President Murray called upon C. W. Murtfeldt to open the session with prayer.

The Finance Committee reported, after which the Committee on Fruits submitted a report on the exhibits. The collection was not large, as to number of entries, Major Hollister said, but was very fine as to quality.

**ON TO BUFFALO.**—The matter of a horticultural excursion to the Pan-American Exposition at Buffalo, N. Y., was taken up and the feasibility of arranging this so as to enable the party to attend the meeting of the American Pomological Society, which would be held in Buffalo September 12-14 was discussed. It is proposed to arrange for a special train to accommodate about 100, this train to start from Chicago about September 1 by a route that would enable the party to visit the great peach orchards of Michigan and Lower Canada, and the famous grape districts of Western New York. It was estimated that the cost per person for transportation, Pullman sleeper, meals en route and admission to the Exposition will be about \$45 for a two-weeks' trip—the party numbers 100.

**THE DEPARTED.**—In April last occurred the death of Capt. T. W. Gant of Maryville, Mo., for many years an active and beloved member of the Missouri State Horticultural Society. Prof. C. H. Dutcher of the Committee on Obituary paid a beautiful tribute to Capt. Gant's memory.

**WINTER MEETING.**—An opportunity was given representatives of different places to present claims for the next winter meeting of the society. Springfield and St. Joseph were the two active contestants for the honor. The decision in the matter was left with the Executive Committee.

(To be continued.)

## CENTRAL MISSOURI NOTES.

Editor RURAL WORLD: During my 30 years of residence in Central Missouri, thus far has been the driest; we have had no rains worth mentioning, from early in April up to this date.

Strawberries are about one-fourth of an average crop. We placed our first berries on the market May 14, and the last June 12. This is not a bad showing to be made without rain.

Cherries yielded an abundant crop of

as much fruit as they did this spring. I pruned my peach trees when they were in bloom, cutting away from one-half to two-thirds of the bloom. On June 15 I finished thinning them out, so there are few, if any, closer than four inches of each other.

Apples promise about 50 per cent of a full crop; as usual, Ben Davis leads other varieties in bearing.

Berries and blackberries will hardly be worth picking this year. I planted out about 250 peach trees this spring by the Stringfellow method, with the exception that the ground was thoroughly cultivated before planting out, and had very few, if any, trees that have succumbed to the drouth so far.

Cole Co., Mo.

## KANSAS FRUIT NOTES.

Editor RURAL WORLD: Early blackberries are getting ripe. The spring was very cool. Perhaps this will be all the better for the winter apples. I have just been pinching the ends off the Golden Beauty plum grafts I got from Samuel Miller, so they would harden their wood that the wind would not break them off. I have found this the best plan, as it checks the long, slender growth and ripens the wood. In a week or two they start out again, and the wind can not break them off.

The Missing Link apple grafts and the Paragon chestnuts I got of the Judge are doing well. The chestnut leaves look like those of the Pin oak. I sent him a dollar in stamps a few weeks ago. I would like to know whether he got it. I always read his articles with interest.

Mr. P. C. Brown of Montgomery Co., Kas., wants a remedy for the round-headed borer. I have two. One is my own and one I got from the RURAL WORLD. Both will do the work. My wash is: Twenty pounds of resin, three pounds of lye, and three pints of linseed oil. Don't use grease, it will kill the trees. Put in an iron kettle and cover these ingredients with water and heat until all are dissolved. Then boil for 20 minutes. This should make about six gallons. When you are ready to wash the trees, take one gallon of the mixture and pour two gallons of boiling water on it. Stir well and add one ounce of Paris green or London purple. Apply with a paint brush to the trunk of the tree from the ground up to 18 inches.

RURAL WORLD RECIPE.—Four quarts of air slaked lime, two quarts of soft soap, one pound of sulphur, half pint of crude carbolic acid, and a double handful of salt. Mix about as thick as paint and apply with a broom. I found the following contrivance the best for applying the wash: Take the leg of old overalls, cut a two-foot length from it and turn over so as to be double, and fasten this to a broom handle. Then cut the cloth in strings. I dip this in the wash and slap it around the tree. The salt hardens the lime and it stays on all summer. I have tried the first remedy for five years and the latter for two years. Before using a wash, I lost over 400 trees, and have not lost any since by borers. I wash the last of May and the first of June.

Mr. Brown, if you are not too far away, drive over to sec. 3, range 17, town 32, Dun Creek Township, and see my 18-year-old trees all healthy.

H. BELLAIRE.

## SOUTHEAST MISSOURI NOTES.

Editor RURAL WORLD: The prospects for a good crop of grapes is as good as I ever saw; our vines are all simply loaded down, and the bunches are large and well filled. The berries of Worden and Concord are about the size of buckshot. We sprayed once early, before the buds started, all the old wood of the vines, and also the stakes of the trellis; the second time just before the bloom opened. We intended spraying the third time, and may do so yet, but the weather has been so dry and warm. We don't apprehend any danger from black-rot. We hauled decayed wood and leaf mould from the woods last winter, and mulched the vineyard, cultivated the top dressing in thoroughly with a Planet Jr. cultivator early in the spring, and will put a dust mulch there all season.

Isaac D. Sneed of Jerseyville, furnished a very interesting paper on "Spraying." Daniel Shank of Clayton, read an instructive paper on the "Propagation of the Ben Davis Apple." Dr. C. W. Rock or Quincy favored the meeting with a timely talk on the "Roots of Trees."

## SPRAYING THE RASPBERRY.

A paper by J. E. May, Adair County, Mo. Read at the Late Meeting of the Missouri Horticultural Society.

As I have been growing the raspberry for commercial purposes but a short time, my experience is somewhat limited, and I am sure Secretary Goodman could have assigned the subject given to me to some one who could have written a more interesting and instructive paper than I can.

I have always grown the raspberry for home use, both red and black, and never had occasion to spray until I came to Missouri, which was in the spring of 1892. On the farm we purchased I found the Turner red and some variety of black raspberries. These produced us one or two crops of fruit and then died out, I supposed winter killed. Not wishing to be without raspberries, I purchased 100 plants each of the Cuthbert and Hopkins, and put them out, giving good culture. They made a fine growth and I expected a fine crop of berries, but when spring came I found them nearly all dead.

"Winter killed again," I said, and decided they were not hardy enough for this climate. I left the plants, however, hoping for a crop next summer. The plants made a fine growth and it was with much interest that I watched the bushes the next spring, but was doomed to disappointment, for they were dead. I have never been able to pick a gallon of berries from the 300 plants.

I was taking a fruit paper at the time, and read an article in it describing a disease called anthracnose that attacked the raspberry; so I began to investigate and found that was the trouble with my bushes. Let me say that the Turner has never been affected with the disease, and is growing right by the side of the Cuthbert.

The Pears bloomed while the weather was wet and cold; also the early cherries. So the trees only set a small amount of fruit. The Keifler are blooming pretty badly this season. Some growers advise cutting back and burning the blighted parts; others say the more you cut the worse it is for the tree. Our youngest pear orchard of 170 Keiflers and Garbers is in cultivated land, planted to melons. No blight has shown here. The four-year-old trees are in a clover spot. The blight is on the Keifler. There are no signs of blight on the Garber.

**MULBERRIES.**—We have a good many native mulberry trees, and the fruit is now ripening. The birds and chickadees are very fond of this fruit. Some trees are in the chicken yard. The Russian mulberry is like the Marianna plum, not worth the planting here, so far as the value of the fruit is concerned. The tree of either is ornamental, but I would rather plant a May cherry.

**WILD FRUIT AND NUTS.**—Last year the hickory nuts, walnuts and butter nuts were almost an entire failure here; also the papaw was very scarce. The fruit never reaches the ground where the chickens can get them.

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## PLUM TREES.

In order to introduce their Low Metal Wheels and Wide Tires, the Empire Manufacturing Company, Quincy, Ill., have placed upon the market a Farmer's Handy Wagon, which is only 25 inches wide, fitted with 24 and 30 inch wheels with four-inch tire, and sold for only \$2.50.

Colonies of bees, well supplied with drones of the right sort, were placed close up against the wall of the tent on the outside, each colony being allowed two entrances. One entrance opened outside, covering it with mosquito net. Long poles were set in the ground and well braced, the tops being tied with heavy wire before covering with the netting.

## Live Stock.

### DATE CLAIMS FOR LIVE STOCK SALES.

Oct. 21, 1901.—E. E. Axline, Oak Grove, Mo., Poland-Chinas.

Oct. 2—E. S. Donahay, Newton, Iowa, Shorthorns.

Oct. 2—F. M. & O. B. Cahn and Jas. Novinger & Sons, Novinger, Mo., at Kirksville, Mo., Shorthorns.

Oct. 2—A. Alexander and R. G. Robb & Son, Morning Sun, Iowa, Shorthorns.

Nov. 5—E. O. Cowan, New Point, Mo., and W. T. & H. R. Clay, Plattsburg, Mo., at Kansas City, Shorthorns.

Dec. 10, 11, 12, and 13—Kirk B. Armour and Jas. A. Funkhouser, at Kansas City, Hereford cattle.

Dec. 18—C. D. Bellows, Maryville, Mo., at South Omaha, Shorthorns.

January 28 to Jan. 31, 1901.—Sothams' annual Criterion Sale, at Kansas City.

Jan. 14, 15, and 16—Cornish & Fatten, Oshorn, Mo., and others, at Kansas City, Mo., Hereford cattle.

Feb. 11-12, 1902.—Redhead Anstey, Bayles and others, at South Omaha, Neb., Hereford cattle.

March 6—I. M. Forbes & Son, Henry, Ill.; J. F. Prather, Williamsport, Ill.; C. B. Dustin & Son, Summer Hill, Ill.; T. J. Wornall, Mosby, Mo., and others, at Chicago, Ill., Shorthorns.

March 11—W. P. Nichols, West Liberty, Iowa, Shorthorns.

June 18—C. E. McLane, Danville, Ind., Durhams, Double Standard Polled Durhams.

The "National Hereford Exchange" under management of T. F. B. Sotham, as follows:

Nov. 20-22, 1901.—East St. Louis.

March 25-27, 1902.—Chicago.

April 22-24, 1902.—Kansas City.

May 27-29, 1902.—Omaha.

June 24-26, 1902.—Chicago.

### SELECTING SHORTHORNS.

Points to Be Noted in Choosing Breeding Animals.

Editor RURAL WORLD: In compunction with your request in your issue of June 12, to give "A Reader" points to note in the selection of a young Shorthorn bull and heifer, I do so, hoping thereby to my something that will be beneficial to "A Reader" and other readers of your most esteemed paper.

Assuming that the type of Shorthorn you inquire seek information about is that of the beef producing strain, I will confine my remarks to that type of animal. It might be well to here suggest if he is going exclusively and scientifically into the Shorthorn breeding business, it is important that he secure some of the valuable books that treat on Shorthorn breeding. Let him read them carefully. In this way he could obtain from the best authorities on the subject more knowledge than any livestock auctioneer could possibly impart to him in a brief description through the columns of your paper. The important requirement of all, however, is to possess the peculiar talent to make a breeder—that is, a critical eye for form, symmetry, and the proportion of the several parts of an animal each to the others.

The breeder must be the judge in the selection of parents, of their fitness to transmit the desired qualities; he should have a thorough practical training, should read the publications of accredited writers, and be a student as it were to keep up with the times.

INDIVIDUAL MERIT.—A writer in commenting recently on the Westrop Shorthorn sale, where Sweet Violet 2d sold for \$3,75, says, among other things: "It establishes the fact that Shorthorn breeders have at last gotten on to the sound foundation of individual merit and that the leaders of the Shorthorn interest are seeking to gain and perpetuate that individual merit by inheritance." The beginner should learn to make his selection of animals to start a herd with on the "individual merit" plan. Another writer, referring to an article written by the writer mentioned above, says: "I agree with him, that the first thing to be considered in a Shorthorn is individuality and that pedigree comes second. I prefer both, and try to buy individuals possessing both. \* \* \* My instructions from my employer, for whom I am buying, are to buy the best I can find, and to buy Shorthorns, not pedigrees;" this for the information of "A Reader."

NOW AS TO THE POINTS to note in selecting a Shorthorn bull and heifer, I quote extensively from the "American Farmers' Stock Book." The Shorthorn bull should possess purity of breed on both sides. Sire and dam should have reputation for docility of disposition, early maturity and aptitude to fatten. The sire should be a good stock getter, the dam a good breeder and giving a large quantity of milk. The head should be muscular and fine, the horns fine and gradually tapering to a point, of a flat rather than of a round shape at the base, short and inclined to turn up; those of a clear waxy color to be preferred, but such as are of a transparent white and tinged with yellow admissible. The ears should be small, thin and covered with soft hair, playing quick and of fine action. The forehead should be short, broad, especially between the eyes and slightly dished; eyes bright, placid and rather prominent with a yellow rim around them; lower part of the face clean, dished and well developing the course of the veins; muzzle small, nose of a clear orange or light chocolate color; nostrils wide and open; lower jaw clean and thin.

Neck should be fine and slightly arched, strongly and well set on the head and shoulders, harmoniously widening, deepening and rounding as it approaches the latter point; no dewlap. The chest should be broad, deep and projecting, the brisket on a lower line than the belly, shoulders broad, strong, fine and well placed. The forelegs should be short, straight and standing rather wide apart than narrow; forearm muscular, slightly swelling and full above the knee. The bone should be fine and flat; knee well knit and strong, foot flat and in shape an oblong semi-circle. The horn of the hoof should be sound and of a clear waxy color. The heart girth should be good, barrel round and deep and well ribbed up to the hips; back short, straight and broad from the withers to the setting on of the tail; crope round and full; loins broad, buckle bones on a level with the back; tail well set, on a level with the back; fine and gradually diminishing to a point, and hanging without the brush, an inch or so below the hook, at right angles with the back.

The hind quarters from the hock to

the point of the rump should be well filled up; twist well laid down and full; hind legs short, straight and well spread apart, gradually swelling and rounding

above the hock; the bone fine and flat below; legs not to cross each other in walking; nor to straddle behind. The skin should be of medium thickness, movable and mellow; a white color is admirable, but rich cream or orange much preferable; hair well covering the hide, soft and fine, and if undercoated with soft thick fur in winter, so much the better.

COLOR.—Solid red has been the prevailing or fashionable color, but the red roans are fast becoming popular. A black or dark brown nose or a rim around the eye, black or dark spots on the skin and hair are decidedly objectionable; and indicative of coarse meat and bad blood.

THE HEIFER.—The points to be taken into consideration in the selection of a Shorthorn heifer differ from those of the bull in the following: The head is small and tapering, long and narrower in proportion than that of the bull, and should possess rather a graceful feminine character. The neck should be fine and thin, straight and well set on the head and shoulders and slightly rounding in a delicate feminine manner as it approaches the latter point. The udder should be broad, full, extending well forward along the belly, and well up behind; teats of a good size for the hand, squarely placed with a slight oblique pointing out, wide apart, when pressed by the hand the milk flowing from them freely. Extra teats are indicative of good milking qualities, but should never be milked, as they draw the bag out of shape. HARRY GRAHAM, Live Stock Auctioneer.

Livingston Co., Mo.

### SHORTHORN AFFAIRS

Within and Without.

Editor RURAL WORLD: One year ago the office force of the American Shorthorn Breeders' Association was at least eight months behind with the work. This was due largely to the increasing business resulting from improved conditions of trade; also to the "deluge" of pedigrees that came in during the closing months of 1899, December of that year showing the record-breaking sales over 12,000 pedigrees. During last July the office force was increased and the accumulated work would have been disposed of by the annual meeting in December, only for the increased work made necessary by the shows and sales conducted by the association.

UP TO DATE.—However, I am glad to report to all patrons of the office and friends of the breed, that we are practically up with the work. Pedigrees coming to the office now are checked and certificates of acceptance are sent, and certified copies when ordered, within one week from the time the pedigree is received. In cases of emergency certified copies can be furnished on one day's notice, and in a few instances, during the last month, small orders have been filled within an hour after the order was received.

Much praise is justly due Secretary John W. Groves for the improved condition in the work, and to his faithful complement of clerks, some of whom have been several years in the office, and I am sure the patrons of the office will accord him due credit for his energetic and efficient work when it is more fully known.

As I have seen in the office but a very short time, and so claim no credit for what has been accomplished, I can, I trust, bespeak the appreciation of faithfulness of my associates in the office, without being liable to the charge of self-laudation.

As a brief account of the methods in the office may interest some readers, I will say that when letters are received they are opened and the pedigrees hastily examined to see if date of birth, color, sex, signature of breeder, etc., are given.

A good many are deficient in some of these requirements, and so have to be returned to the sender, or else held until completed by correspondence. This, of course, causes delay and sometimes great disappointment to breeders who have certified copies quickly. If all pedigree were examined carefully before being sent to the office, to guard against omissions or mistakes, the work of the office would be greatly facilitated, and more prompt and satisfactory service given.

COL. JAS. W. SPARKS.—In a letter to the RURAL WORLD enclosing check for advertising bill, Col. Jas. W. Sparks, the well known auctioneer, says: "I have just finished my season's work, selling in 12 different states, making 140 sales for the best breeders in the United States. I am booked for a good list for the coming season and have only a few dates yet open."

Mitchell & Selfridge, Indian Territory, \$2 wintered Texas steers, average 902 lbs., at \$3.40, and 16 cows, \$14 lbs., at \$2.90.

J. H. McCaskey, Texas, 24 fed steers, average 917 lbs., at \$4.00, and 72 fed steers, \$66 lbs., at \$4.45.

J. E. Hefner, Indian Territory, 15 fed steers that averaged 1,968 lbs. and brought \$4.85.

A. J. Kohler, Kansas, some little corned dogies which weighed 937 lbs. and brought \$4.50.

W. H. Linton, Kansas, a load of native feeders which weighed 915 lbs. and brought \$4.45.

D. H. Middleton & Co., Indian Territory, 84 calves, average 224 lbs., at \$4.00; 27 grass cows, average 750 lbs., at \$3.35; 50 steers (grass), average \$3.75.

H. H. Halsell, Texas, 109 grass Texas, average 931 lbs., at \$4.05, and 28 grass cows, average 731 lbs., at \$3.00.

E. Coonaugh, Texas, 19 grass Texas cows average 854 lbs., at \$3.10, and 4 bulls (grass) 1,160 lbs., at \$3.25.

A. D. Turner, Texas, 34 fed Texas steers, average 917 lbs., and sold for \$4.15; also 8 bulls, \$66 lbs., at \$2.90, and 4 cows, 1,026 lbs., at \$3.40.

W. I. Longbottom, Texas, 19 grass Texas steers, average 846 lbs., at \$3.60.

J. H. McCaskey, Texas, 24 fed steers, average 917 lbs., at \$4.00, and 72 fed steers, \$66 lbs., at \$4.45.

J. E. Hefner, Indian Territory, 15 fed steers that averaged 1,968 lbs. and brought \$4.85.

R. D. Williams, Texas, a load of mixed grass Texas at \$3.40 to \$3.55.

Todd & Brown, Indian Territory, 85 calves, average 199 lbs., and brought \$4.85; 26 cows (grass), 830 lbs., at \$3.50, and 2 steers (grass), 1,010 lbs., at \$4.50.

P. H. Boughman, Kansas, a load of light mixed hoggs at \$3.75.

L. A. Keys, Indian Territory, a load of pigs at \$3.75.

C. F. Featherston, Indian Territory, 100 grass wintered Texas steers, average 902 lbs., at \$3.40, and 16 cows, \$14 lbs., at \$2.90.

W. D. Van Eaton, Texas, 44 fed Texas steers, average 917 lbs., at \$4.00, and 1,076 lbs., which brought \$4.45.

L. C. Pease, Texas, a load of mixed grass Texas at \$3.40 to \$3.55.

Hadley & Harris, Texas, 50 common grass cows, average 730 lbs., at \$3.10.

B. F. Simmons, Texas, 43 plain but very fat fed Texas steers, average 1,072 lbs., and brought \$4.85.

L. C. Pease, Texas, a load of mixed grass Texas at \$3.40 to \$3.55.

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## Horseman.



The Moberly, Mo., races take place July 23-26 inclusive. Entries close July 17, and records made after June 18 do not bar. This race meeting is only a month from now, and the entries close in about three weeks. No time is to be lost in preparing to make the entries.

According to Supt. Hankinson, of the Society for the Prevention of Cruelty to Animals, a new disease, similar to grip, has appeared among the horses in New York City, and is rapidly killing them. The disease was first discovered last Saturday, and from the reports submitted by the leading veterinary surgeons, fully ten thousand horses are to-day suffering from it.

### WHAT GIVES A RECORD.

Editor RURAL WORLD: I am the owner of the Dusquill, by Duquesne, 2800, record 2:17%, first dam Maud, by Regular, son of Volunteer 55. Dusquill has already served 56 mares this season, and has more engaged to him. Please publish through the RURAL WORLD what it takes to qualify a horse to be eligible to record in American Trotting Association.

Huntville, Mo. ISAAC MILLER.

REPLY.—It takes speed enough to win a heat or a race on any race track that is a member of the American Trotting Association, the race to be trotted under the rules of said association. A heat won on any track, at any County Fair, or regular trotting meeting, if according to the rules of the Association, gives a horse a record in the time announced from the stand.

With the thermometer climbing up to the 100 mark, the classes were not well filled, though the racing was quite good at Forest Park at last Saturday's matinee. The summaries:

### Classified trot:

Meadow Rue, b. g., Thomas Knox. 1 1 Mongrel, b. m., Colman Stock Farm. 2 2 Louis Medium, g. g., Louis Speiblinski. 3 4 Lucky Boy, b. g., Clem Welck ..... 4 3 Time—2:25. 2:35%.

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King Mack, b. g., Louis Speiblinski. 2 1 King Dumas, b. g., Montesuma Stable ..... 1 2 Indian Jack, b. g., Jos. Hennessy. 3 3 Time—2:22. 2:37%.

### Classified pace:

Monelle, r. m., Colman Stock Farm. 1 1 Nellie Dumas, b. m., L. Petersen. 2 2 Time—2:37%. 2:29%.

### COLUMBIA (MO.) RACES.

Editor RURAL WORLD: Our Board of Directors have declared Stakes No. 1, 2:45 trot; No. 2, 2:30 trot; No. 3, 2:25 trot; also No. 6, 2:35 pace; No. 7, 2:25 pace; No. 8, 2:17 pace, satisfactorily filled. Stakes No. 4, 2:18 trot; No. 5, 2:25 trot; No. 9, 2:11 pace; No. 10, three-year-old pace, and No. 11, three-year-old trot, declared off, as there were not sufficient number of entries. We now open purse of \$250 for 2:25 trot and three-year-old and under pace. Entries close July 29th. List of owners and horses in classes filled will follow this notice in a few days.

N. E. ROBBNETT, Sec'y.

### THE SOUTHWEST MISSOURI CIRCUIT.

Editor RURAL WORLD: I have your favor in which you request entry list. I can not yet get this out for some time yet. I have notified all horsemen as required by the rules, and the circumstances are just this with me. I threw

all my energy and most of my time into the work of making the stakes a success, and I am pleased to advise you that the stakes filled very satisfactorily, but in doing this I neglected my own business to such an extent that I have to denote my time to this now, and my stenographer being sick puts me further behind, as she alone has the business in mind so that two can work. A new hand aids but little in this work. No one can suffer any inconvenience now, hence I may be a little slow in preparing a complete list of entries, as all have to be gone over carefully and recomposed.

I believe that I advised you that we declared the following classes filled and we closed these stakes: 2:45 trot, 2:30 trot, 2:23 trot, 2:35 pace, 2:25 pace, 2:17 pace, 3:00 three-year-old and under pace, and two-year-old. The three-year-old trot did not fill, but the entries were encouraging and we opened a \$200 purse for 2:25 trot, 2:35% pace, 2:25% pace. While it would afford me pleasure to furnish you the entry list, circumstances compel me to delay it.

JNO. D. MOORE, Secretary.

### A MILE TRACK.

Mr. Jucket is handling a two-year-old by Roulette, dame Yucca, by Akbar, son of Bostwick's Almont, Jr., second dam Tennessee Wilkes. This mare is owned by George M. Isenhower, of Milford, Mo. She has been bred and is in foal to Redward 3226, by Eagalite 2225, son of Ondward. Mr. Isenhouer is a new breeder and has a standard mare, Ole G., by Rushville 3303, son of Blue Bull 75, in foal to Albert M. The dam of this mare is Minnie Dean, by General Garfield.

Mr. McNaught, who owns Judge Burnham, is from Iowa, and is only temporarily at Lamar. He has bought the Golden City Stock Farm two miles west of Golden City, Mo., and next spring will take possession, when that will be the home of the black horse. Southwest Missouri is coming to the front in breeding good harness horses.

J. W. Cross, of Sheldon, Mo., is one of the older breeders of the state. He owns Gertrude Medium (2) by Mambrino Medium 5565, dam Gertrude Dibble, by Motor 7411, granddam Daisy Dean, by Ebony 1228, and owns jointly with D. F. Jordan Red Edgewood 3004, son of King Nutwood 10291, dam Lady Cristobel, by Conrad, brother to Anteros, by the records the leading Missouri sire. This gives us a Nutwood-Electroine cross which should be valuable on Star of Saline mares. Star of Saline is by Star of the West, 2:26, sire of Joe Young, sire of the dam of Joe Patchen, 2:31%. In addition to these two standard bred colts, Mr. Cross has three colts by Nutmegger, out of a saddle bred mare, Bird, by Dan Akers, Jr., by Dan Akers, son of Richmond, Norlaine, by Pilot Chief, son of Mambrino Blackwell, by Clark Chief, dam by Joe Elmo, has a three-year-old filly by Star of Saline, a sucking filly by Nutmegger, and a promising gray gelding by a son of Alpinator, by Pilot Medium, dam by a pacing horse called a Wilkes and owned by Harry Tambin several years ago when he lived at Lamar. Bird is not only a saddle-gaited

mare, but is quite fast at the pace.

Her colts are liable to be fast and make race horses.

C. A. Cubbin has been branching out

and discovered that a stride of 24 feet in a 1:40 gait was exactly the same as one of 20 feet in 2:30, regarding the quickness of the action. These strides were taken as fair examples of the flying gallop and the very fast trot, close to the limit in the ground covered, and when in making the second calculation the figures kept coming 4, 5, 4, 5. I held it was favorable augury that a trotter would come to the front which had the stride and rapidity of action—"quickness of gather," the old-time horseman called it—to accomplish the feat. Assuming that The Abbott had a stride of a shade under 19 feet when trotting the quarter in 29 seconds, there would be 70 strides in the quarter, the duration of each 412 seconds. That The Abbott can trot a "measured mile" in two minutes is reasonably well assured. Salvator ran a mile on a straight course some three seconds faster than the record on a circular, and the difference between 1:36 and a fraction and 1:38 and a fraction, and 2:30 and 2:30% is enough to install the Champion the choice against time, should it come off in direct line, on good ground, and Geers pronounces him fit."

Now, this man made a failure of the horse business. He bred to a sire because he was handy and cheap. In the same year was another farmer who had some horses to sell, and he also saw the same buyer and asked him to come out to see his stock, saying he had thirty head of high-grade Percheron horses. The buyer went out and bought from him nearly one car of good, fat, marketable horses. This man made a success of the horse business, for he had an object in view, and bred to the best all the time. The buyer could afford to pay him more for the stock, as he did not have to run over the county, and his stock was fat and ready for market.

One thing I wish to impress on the mind of the farmer breeder who depends on others to furnish sires, no sire is too good for your mares, and when you get a good sire that produces good, uniform colts, stay by him, and do not leave him because some smooth talker comes in with a new one and says he is the best ever imported. Use full-blooded horses, if possible, as by doing this you are more sure of getting a uniform class but it is not necessary to use an imported sire to secure a good progeny. When you are getting something good from a sire stay with him.

About a year ago I was attending a sale, and among others sold was a large Percheron sire, and when the horse was brought into the sale ring the owner made the statement in public that there were not two carloads of matured horses from him in the country. Now this I thought strange, as I know the horse had been a successful breeder, and he had eight or ten years in this country; so I asked him if this was the truth, why it was. He said the colts all made good, salable horses, and the buyers gave more for them than the owners thought them worth, so they were sold and shipped out of the county.—H. T. Terry, before Kansas State Board of Agriculture.

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L. E. CLEMENTS' HORSE GOSSIP.

Editor RURAL WORLD: The "Western Horseman" comes to hand much improved since the name of Dr. J. W. Neal again files at the head as managing editor. Still Columbus goes merrily on cracking his old chestnuts. He ought to write stories for the Augusta, Me., story papers. They do not deal in facts, and to meet their demands he would not have to change enough to trouble himself. Notice—"Falmont stood second last season as a sire of speed, age considered." It requires wonderful imagination to invent stories like that for a horse with only two in the list, and one of those only just inside, in one heat in a purse for \$60, and neither of the other heats within ten seconds of standard time. This mare, Lady Ruth, is strictly trotting bred. The only performer that could attract attention to the sire is out of a pacer named with a pacing record of 2:30, and sired by a grandson of Blue Bull. Cart horses have sometimes done nearly as much, and even a few thoroughbreds could be counted in the same list. Crito, 2:13%, the bike, has ten mares. Col. Lewis, 2:18%, to high winds, sired by a thoroughbred, has 21 winning heats. It is safe to keep in bounds of truth in speaking of any horse. Falmont can not make a reputation on Crito alone, and at the present time he has nothing else to warrant an assumption of greatness.

The 15-year-old sire Albert M., 2:25%, and sire of Clifftie, 2:19%, and Ray Wilkes, 2:28%, is now owned at Lamar, Mo. I had begun to look at Lamar, as I did at the "Western Horseman," as practically out of the competition. They also have Judge Burnham 2766, son of Adrian Wilkes 6660, out of Medora, by Mambrino Hound 1355, the dam of Fair Oaks, 2:26 (a brother to Judge Burnham), Sella Watson (p.), 2:24%, by Trump 13987, and her brother Trumppetone (p.), 2:21%. Trump is by Adrian "Wilkes" dam Collette, by King Cole 3100, son of Masterlode. Lamar has bred some good ones, Bessie T., 2:10%, being the fastest.

Trotting Editor Cogswell of the Boston "Traveler" has had a talk with Trainer Jack Trout, who, among other things, said: "How have I worked Anaconda?" Well, the fastest mile has been in 2:14%, and the slowest 2:18%. Last Thursday I stepped him three miles in 2:18%, last half in 1:08%; 2:17%, last half 1:06%; and 2:16, last half in 1:05. He is a bad horse to work slow. If I tried to have him step slower than 2:20 he would have to be checked high, and even then I would be compelled to take hold of him a good deal harder than would be wise. But I will tell you one thing, he is broken now, which is something he was not when I got him. I jog him anywhere I please, around electric cars and down in the city of Dover, and he isn't afraid of a thing, nor wants to do anything mean. On the road I can let him move along a 2:40, 2:30 or 2:20 clip, as I please, and he is willing to obey my very wish. He is all right, too, when asked to speed the wrong way of the track. His speed can be controlled the same as on the road. It is when turned the right way of the track that he asks for his head, and you can bet I am not going to pull him double to go a slow mile when one in 2:18 or so is simply a good big job for him."

There are few trainers and drivers in America that can teach J. B. Chandler much more than he already knows at the art of developing the light-harness horse from babyhood up, and the number is even less that can speak their mind more concisely and to the point. At one of the Grand Circuit meetings," writes "Driftwood," in "The Horse Breeder," the judges removed one of the drivers for not driving to win, and asked Mr. Chandler to drive. He immediately went up into the stand and to the astonished judges stated that he would also pull the horse if he drove him. "What do you mean by making such a statement?" said the presiding judge. "I mean, sir, that I have \$500 in pools on the other horse." Further explanation was unnecessary. On another occasion at St. Paul the scoring in a race had become quite tedious. The starting judge called to Mr. Chandler in a very severe tone, calculated to impress the driver with a wholesome fear of the consequence: "You must bring your horse up with the pole horse, and don't delay us any longer." The answer was prompt: "Sir, I have educated this mare from the time she was first broken until the present day, but to step a quarter at a two-minute gait is part of her education that has not yet been completed." It is needless to add the starter ordered the pole horse to come slower."

"The longest trotting stride I ever 'taped,'" writes Joseph Cairns Simpson in "The Horse Review," "was 20.5 feet, the longest running 23 feet. Three trotters, Queen of the West, Ida May and Gloster, made that mark; the only runner, Chance, and he by Venture, the sire of the dam of Directum. The second longest running stride was 26 feet; the most of them were from 19 to 24 feet. The answer was prompt: "Sir, I have educated this mare from the time she was first broken until the present day, but to step a quarter at a two-minute gait is part of her education that has not yet been completed." It is needless to add the starter ordered the pole horse to come slower."

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## Home Circle.

Written for the RURAL WORLD.  
GOLDEN SEAS—A HARVEST IDYL

Rolling far and rolling wide,  
Boatless waves and wind-swept tide,  
In the smile of summer rays,  
Side by side with th' whispering maize,  
Where the locust casts its blooms  
On thelichen-covered tombs,  
Down the clover-sprinkled lanes,  
Traversed by the creaking wanes;  
'Long the turnpike's dusty way,  
Squaring up the fields of hay;  
Where the wild grape's dense festoons  
Twilight make of summer noon;  
Circling 'round the silent school,  
Waving o'er the spring-fed pool;  
Skirting grove and pasture land  
Where the hermit oak trees stand,  
Rolling by the orchard lots,  
Flowing round the berry plots;  
Farther than the eyes dim sight,  
Way beyond the bounds of night,  
Gently ruffled in the breeze,  
Peacefully roll the golden seas.

Slow and steady, sure and strong,  
Runs the ancient harvest song.

Hush! \* \* \* Rest!

Hush! \* \* \* Rest!

Fall the golden swath of grain;  
Hush! \* \* \* Rest!

Hush! \* \* \* Rest!

Crost the valley, o'er the plain.

Follows then the binder's whir,  
Triple-horsed, discharging sheaves,

King of harvest, usurper

And the ancient cradle grooves.

Down beneath the surging billows,  
'Midst the clover, newly springing,  
By the ranks of weeping willows  
Hear the crickets happy singing,  
And the bob white runs about  
And the turtle hatches out  
Thro' long visages of the wood,  
Far upon the sun-kissed hills,  
Where the wild duck rears her brood—  
Ev'rywhere God's bounty wills,  
Filling up earth's granaries  
Flash the mellow, golden seas.

Lo! the reaping days are over;  
Neath the hot sun burns the clover;  
Golden seas are passed away  
And no more their billows play.

Countless o'er hill, vale and plain  
Spread the glist'ning tents of grain;  
Like some great vast army camping,  
With no noise of horse's army camping,  
And no princely soldiers tramping,

ALEXANDER F. HUSTON.  
Clermont Co., O.

Written for the RURAL WORLD.

THAT FOURTH OF JULY.

The writer has no more pleasant memory than that of the first Fourth of July celebration in Missouri. Having been brought up in an Eastern city, and having just completed a school course when the family moved to this state, I had no knowledge of Fourth of July celebrations other than the noisy, ear-splitting, nerve-racking affairs that city people enjoy; no; endure with long suffering patience, wishing many times, if too patriotic to voice such traitorous sentiments, in words that there never was a Fourth of July.

The new home was made in this prairie section of N. W. Missouri, and desirable picnic grounds were not always to be found; yet not far distant was a stream known as Marrow Bone Creek, and this was skirted with quite a good growth of timber.

The farmers in this community were all pioneers, and were a most intelligent class of people, the majority of them being New Englanders or of New England parentage; and the love of liberty was not permitted to assuage though booming cannon and processions and flying banners were not the possible order of the hour. Instead a genuine neighborhood picnic of farmers was planned for. Most beautiful grounds were selected along the creek, and within an hour's ride of the most distantly located family. Water was convenient, and teams were made comfortable. Grounds were cleared for two or three croquet sets, and swings put up. Well filled baskets were taken by each family. When the noon hour came table cloths were spread on the grass and an almost hollow square formed. This plan kept the company together during the lunch hour. Articles of food were exchanged by families sitting near each other, and wholesome merriment ruled for the time, and all seemed "merry as a marriage bell."

There were no lemonade, ice cream or peanut stands to mar one's pleasure, and give an air of barter and trade to the occasion. Flowers were gathered; hats gorgeously decorated. Old-fashioned games were played, in which grandpa and grand child participated. Youthful swains looked admiringly on young maidens, who in turn, looked coyly on favorite youths. Thus the day passed in pleasant chat, innocent games and pleasant scenes. The gathering dispersed in time to attend properly to the evening chores, and no boys returned with breath tainted with rum, as was, sad to say, sometimes the case when, in later years, the old-fashioned Fourth of July picnic was deserted for the celebration in the adjoining town.

If the best of the young people, aided by their parents, will plan for an up-to-date picnic of the families of their neighborhood, to be held in a grove or a nearby woods, the occasion will long be cherished as one of the most delightful. I grow weary when I think of waiting on the corner, under a scorching sun, for the procession to pass, of trying to listen to some patriotic orator when there is a hum of voices all around, and of those cheerless stands where lemonade glasses and ice cream dishes have the kick-and-prime washes.

Ice cream is most palatable on the Fourth of July, and by a little effort in soliciting the milk and cream, sugar, flavoring and either the ice or the money to purchase it, ice cream may be a part of the menu. It can be made on the ground. The boys and girls would think this part of the fun.

Picnics of this character are enjoyable because everybody knows everybody. The families of a school district are enough to include. No city celebration has ever given that delightful freedom from enjoyment that did my first one in Missouri. MRS. MARY ANDERSON.  
Caldwell Co., Mo.

MRS. WINSLOW'S SOOTHING SYRUP. Has been used for over sixty years by millions of children for the cure of the children while teething. Its soother the child, softens the gums, allays pain, cures soreness, and is the best remedy for diaper rash. Sold by Druggists in every part of the world. Be sure to get "Mrs. Winslow's Soothing Syrup," and take no other kind. Twenty-five cents a bottle.

Written for the RURAL WORLD.  
COUNTRY FOLKS SEEING THE ELEPHANT.

We left Brooklyn, one of the suburbs, on the street car, passing Latona, Fremont, and nearly round Lake Union. We passed the great lumber mills, and raft of logs here. A short walk after leaving this car and we are in Kinnickinnic, still another suburb. Here we visited the fine school building of the M. E. Church; it is situated on a hill on magnificent grounds. We met the president, principal and professors, and had a very pleasant visit indeed. After lunch we took the Ballard street car for Grant street. "This is to make you sick of Seattle," said Mrs. S. A. wooden elephant, gayly painted, on a side hill, made us sure we had seen that animal for once. The tide was coming in, much to my friend's regret, as she wanted us to see the most ill-conditioned part of the city—mud, slime, debris and all. The river from the car windows was all we wished to see. It was enough—the black tide creeping in over the debris, old boats, lumber and refuse of all kinds, the hovels and dilapidated habitations of the poor, often built on piles, are set back in the banks.

This seemed bad enough in the Ballard street car, but when we transferred to Grant street, even the people on the cars seemed changed. These cars were not for fastidious people; men and women, with toll-worn hands, and toll-worn hearts were there, if one judged by faces. Out over the piles and trestles, at the creeping, black treacherous water, we moved rapidly onward; out past Bayview and Georgetown and Bremerton. The lumber yards were built on piles and trestles. Out on this line are a hospital and the county poor farm, extending out to the Dismal River, among the green fields, in the pure air. If it were not for the green hills what would the poor people do? As we went back we noted the great gas tanks, the Vulcan Iron Works, Centennial Flouring Mills, the elevators and the fine buildings. We were glad to get back to the University car and leave this grim district for a fairer one.

One day we visited the old State University. It is situated in the heart of the city. The public library is kept here now; that is what is left from the fire which nearly destroyed it.

Another day we visited the book stores and came back with an armful of books, yielding to temptation to the detriment of our purse's contents. Then we went shopping and visited art studios, gazed at the fine business buildings, had our pictures taken, looked into the store windows and wondered where all the folks were going to.

"No king on his throne is so happy to-night." As the farmer boy perched on a rail; whose notes rippled out through the soft mellow light.

And the echoes ring back through the vale.

His faithful dog Rover, so lovingly shares His merry young master's delight, The thrush chimes in with his joy thrilling note.

And the quail whistles out, 'all is right.'

Birds and all living creatures have such interesting ways if we would but take time to notice them.

Last fall I saw such a pretty scene "behind the curtain." I had been on a long ramble and becoming tired sat down on the branch of a fallen tree to rest.

Presently I heard such an odd, chirping note and looking up, saw a little brown quail upon a post among the brambles and weeds of an old fence row. The fence had been moved and the old posts left; between the two fences was a wide, clear space; down into this the little quail flew and I followed to where he was.

As like naughty girls, we wanted to go because we ought not. It is 15 miles on the street cars out to Lake Washington, where the park, named for an old Indian Chief, Leschi, is situated. This road runs through the most beautiful part of the city. The park grounds are beautifully laid out and show great care. The flowers are very fine, even for this land of flowers. There is a great hall, covered with ivy. There is quite a zoological garden. The few people who saw us that rainy afternoon, running about to see the elks, feeding the monkeys, and looking at the bears, and sea lions, would have no trouble in determining who we were country folks.

"Let us not tell mother where we've been," said one of the party, as we neared home.

"She will think it is terrible," said another one with a laugh. "Where have you been, girls?" asked mother.

There was something in the old, familiar question that brought back the time when we always told mother everything, so we confessed, and if we did not get a scolding, it was not because we did not deserve it. ELLA CARPENTER.  
Whatcom Co., Wash.

Written for the RURAL WORLD.  
THE AMERICAN FLAG.

The flag of my country! how proudly I hold

Its stripes and its stars, as it floats in the gale,  
From battlement, tower and mast, o'er a land

As free as the air by which it is fanned!  
A terror alike to the tyrant and slave;

But the standard where rally the good  
and the brave.

The flag of our Union is, indeed, the grandest and most beautiful national emblem that floats to the breeze to-day.

Its history is the history of the growth and greatness of this great nation. Like the nation it was born amidst a fearful contest. The government it then represented consisted of a few scattered colonies, situated along the Atlantic coast, thinly inhabited and impoverished by war. Out of that great struggle came a Union of states that was destined to become the glory of the world and to establish the fact that a free republic, a

government by the people for the people can be maintained. As it grew in population and wealth the difficulties that ensnared its progress were overcome and its stability gradually but surely increased and the star of empire began its westward march. As the years rolled on it spread its wings until all the vast domain to the Pacific ocean, from the Lakes to the Gulf, was gathered beneath the ample folds of the Stars and Stripes; state after state was born to the Union and star after star added to the flag. The population, wealth and intelligence multiplied almost beyond the wildest dreams of the poet and its power was felt to earth's remotest bound.

The came the first note of danger to the life of the republic. The cloud of discord, generating for years until it overshadowed the land like a dark pall, suddenly burst forth in the fury of civil war. Four years of war followed, the most terrible in the annals of history, when peace was declared and the perpetuity of the Union firmly established, with Old Glory waving over a united land. The people resumed their peaceful pursuits, and a long reign of advancement ensued in population, in the arts and sciences, in intelligence and freedom of thought and action unparalleled in the world's history. The domain over which the beautiful emblem of the free wave majestically became the haven of the oppressed of other lands.

The victims of the monarchial governments of Europe appealed for succor and the cry was not unheeded; finally the

wall of the patriots of Cuba was heard and in extending the hand of fellowship, the most dastardly deed of modern times was perpetrated, if not by the consent, at least by the connivance of the despots battling to perpetuate his iron rule over the destinies of the people of that fair land. Again the sons of America, from the North and from the South, rallied around the old flag and the cohorts of tyranny were soon driven over the ocean and the American flag with its noble defenders had once more triumphed over its assailants. That war placed our republic among the foremost nations of earth. Its power is acknowledged and its flag honored by all people. Thus shall survive and be perpetuated the American Union, and its glorious emblem, the American flag with its noble defenders had once more triumphed over its assailants. That war placed our republic among the foremost nations of earth. Its power is acknowledged and its flag honored by all people. 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Thus shall survive and be perpetuated the American Union, and its glorious emblem, the American flag with its noble defenders had once more triumphed over its assailants. That war placed our republic among the foremost nations of earth. Its power



## The Markets

**WHEAT**—Cash Market—Old soft winter chiefly sought after and No. 2 red sold at \$6c for Western to \$6c for choice by sample, 5,000 basis f. o. b. selling at \$6c; No. 2 red sold at \$6c@6c, and No. 4 at \$7c@6c. New No. 2 red sold at \$6c for rather soft and cracked to \$6c for fair, but choice held at \$6c; No. 3 red sold at \$6c, and No. 4 at \$6c. APPLES—Red \$3@5c and green at \$3@5c per 3-gal. tray. PEARS—Jefferson 30¢ per peck box.

**WHORTLEBERRIES**—Arkansas sold at \$2@2.50 per 6-gal. case.

**WATERMELONS**—Texas jobbing at \$2@5c per 100 lb.; car lots from \$300 to \$300 per truck.

**CORN**—Cash Market—Firm, but no higher, as demand very light; so was the supply on sale. By sample, del. No. 2 sold at \$3c@4c; No. 3 at 4c; No. 2 white held at \$4c loaded and \$4c per bushel for No. 3 white sold at \$4c; No. 3 white at 30¢@3c; No. 2 white at 29¢@3c, mainly latter.

**RYE**—Lower to sell and very dull. Grade No. 2 quotable above 4c.

**MILLEFEED**—Steady. Offerings small, as local mills output small, not having been able to make their usual July shipment sales, but demand limited. Skd. bran available at \$6c in large and \$6c in small skds., and bulk at 7c; at mill bran sells at \$6c@7c.

**HAY**—Current rates on trk.: Indiana \$14@15c for choice; \$12@13 for No. 1; \$12@12 for No. 2; \$9@10 for No. 3; prairie, \$11@12 for No. 1; \$8@9 for No. 2; \$8@9.50 for No. 3. Clover, \$10@12.

### PRICES ON CHANGE.

The following tables show the range of prices in future and cash grains:

	Closed Saturday.	Range Monday.	Closed Monday.	Range Last Yr.
Wheat—				
No. 3 red... .67	66	65	67	87@69... .67
No. 3 red... .66	65	66	65	86@68... .66
No. 4 winter... .69	68	67	69	71@70... .68
No. 2 hard... .66	65	67	65	68@67... .66
No. 3 hard... .64	63	65	65	78@75... .64
Corn—				
July... .42%	41%	43%	42%	42%
Sept... .43%	44%	43%	43%	43%
Oats—				
July... .27@27%	30@29%	26@27%	26@27%	26@27%
Sept... .29%	28@29%	26@27%	26@27%	26@27%
Cash wheat, corn and oats ranged:	Range Monday.	Range Saturday.	Range Last Yr.	
Wheat—				
No. 3 red... .67	66	65	67	87@69... .67
No. 3 red... .66	65	66	65	86@68... .66
No. 4 winter... .69	68	67	69	71@70... .68
No. 2 hard... .66	65	67	65	68@67... .66
No. 3 hard... .64	63	65	65	78@75... .64
Corn—				
July... .42@43%	43@44%	42@43%	42@43%	42@43%
No. 3... .42@43%	43@44%	42@43%	42@43%	42@43%
No. 2 white... .45	45@46%	44@45%	44@45%	44@45%
No. 3 white... .44	44@45%	44@45%	44@45%	44@45%
Oats—				
July... .29@30%	30@31%	29@30%	29@30%	29@30%
No. 2 north... .29@30%	30@31%	29@30%	29@30%	29@30%
No. 2 white... .31@32%	32@33%	27@28%	27@28%	27@28%
No. 3 white... .30@31%	31@32%	30@31%	30@31%	30@31%
COTTON—Local spot quotations—Ordinary, 64c; good ordinary, 7c; low middling, 7%; middling, 84c; good middling, 84c; middling fair, 9c.				
WOOL—Movement fair; market unchanged—firm on all bright wools. Current offerings are mainly of Northern and Northwestern growth, and include a good deal of dark and inferior, which are the least desirable; but all stock available is promptly taken, and full quotations paid—even a small fraction more can be obtained for extra desirable lots.				
Missouri and Illinois—Medium combing, 16@17c; medium clothing, 16@17c; braid and low, 15@16c; burry and clear mixed, 14@15c; slight burry, 12@13c; hard burry, 10@11c; fine, 13@14c; heavy fine, 10@11c; lambs, 15c. Wisconsin and Iowa—Medium, 15c; braid and low, 14@15c; semi-bright, 14@15c; dark, 12@13c; fine medium, 12@13c; light fine, 12@13c; heavy fine, 10@11c. Kansas and Nebraska—Bright medium, 15c; dark and sandy, 13@14c; fine medium, 13c; light fine, 12@13c; heavy fine, 9@10c. Texas, Indian Territory and Oklahoma—Medium, 14@15c; coarse and low, 12@13c; fine medium, 14@15c; light fine, 11@11c; heavy fine, 9@10c. Dakota and Western—Bright medium, 15c; dark medium, 12@13c; fine medium, 12@13c; light fine, 12c; heavy fine, 9@10c. Arkansas and Southern—Medium, 16@17c; medium (loose), 15@16c; burry, 11@12c; hard burry, 9@10c. Tub-washed—No. 1, 14@15c; No. 2, 20@22c; burry, 16@17c. Angora goat hair—Long, 14@15c; short and low, 11@12c; burry and cotted, 8@9c. Black and seedy at 4c to 6c per pound less; 1c allowed on old and new wool socks.				
Eggs—Still declining under the damaging influence of the extreme warm weather prevailing. Offerings losing heavily in candling, the greater portion of the stock being heated. Sales were at 8c, loss off, for the best of the current receipts.				
BUTTER—Creamery in limited demand and weak in price; offerings ample. Lower grades firm and wanted; scarce. Country store-packed in demand for shipment.				
Creamery—Extra, 19@20c; firsts, 15@16c; seconds, 14@15c. Country—Choice, 11@12c; poor, fair, 8@10c; grease, 2@3c. Extra—Dairy, 14c; other grades, less. Lard-packed—Extra, 14c; firsts, 13c. In a small way, 1c per pound or more is charged over the foregoing quotations for tub stock.				
CHEESE—Jobbing: Twins, 10c; singles, 10@11c; daisies, long horns and young American, 10@11c; New York, 10@11c; Limburger, 10@11c. Gilt Swiss, 16c; brick, 10@11c.				
LIVE POULTRY—Chickens—Average receipts, hens 7c; roasters, old or stagg young, 34c. Turkeys—Round, lots 7c. Ducks 5@6c. Geese (top for full-feathered) 4c. Spring chickens selling by weight 10@11c per lb.; top price for fancy large; spring ducks 9c; spring geese 8c per lb.; pigeons 3c per doz.; squabs 7c.				
DRESSED POULTRY—Iced stock, scalded and undrawn, with heads and legs on: Chickens—Average 7c; roasters 4c. Turkey—Extra, 14c; other grades, less. Lard-packed—Extra, 14c; firsts, 13c. In a small way, 1c per pound or more is charged over the foregoing quotations for tub stock.				
STRAWBERRIES—Home-grown berries sold loose at 7c@8c per 3-gal. tray.				
PEACHES—Texas in peck boxes, quotable at 2@3c and 4-basket crates at 50@60c for common; fancy at 60@65c per 4-basket crate and 5@60c per peck box; Alabama 4-basket crates 50@75c; Tennessee peck bxs. 2c; 1-3-bu. bxs. 30@45c; Arkansas 1-3-bu. bxs. 2c; 1-3-bu. bxs. 30@45c; Arkansas 1-3-bu. bxs. 20@25c; fancy West Point fruit sold loose at \$2@2.50 per 4-basket crate.				
CHERRIES—Consigned lots of fancy sweet 75@85c per 1/2-bu. basket; sour sell at 50@60c per 1/2-bu. basket. Home-grown sold mainly at 70@75c per 4-gal. tray; 50@55c per 3-gal. tray.				
PLUMS—Wild goose 75c@81; Chickasaw 50@60c per 6-gal. case; Alabama Japan plums 50@60c per 4-basket crate.				
ADDITIONAL LIVE STOCK MARKETS ON PAGE 4.				
THE CHILLICOTHE NORMAL				
We invite the attention of our readers to the advertisement of the noted Chillicothe Normal on this page. This popular school offers many special advantages, among which are that students can select their own studies, receive private help free, no examination on entering, text-books free, good table board \$1.50 a week, etc., etc. This institution will begin its twelfth year Sept. 3, 1901. Its popularity has not been won by endowments or appropriations, but by its merits. President Allen Moore will take pleasure in sending free an illustrated catalogue. Address him at Chillicothe, Mo.				
GOOSEBERRIES—Home-grown sell at 6c per 3-gal. tray loose.				
BLACKBERRIES—Quote choice sound at \$1@1.25 per 6-gal. case; soft and damaged less. Home-grown 90c@11 per 2-gal. tray.				
RASPBERRIES—Black from Arkansas quotable at 75c@81 per 3-gal. case; red 11@15c; home-grown at 75@90c for black and \$1.50@2.25 for red per 3-gal. case.				
CURRANTS—Home-grown at 75c per 3-gal. tray.				
APPLES—Red \$3@5c and green at 30@35c per 1-3-bu. box; white 30@35c; Arkansas and Mississippi peck bxs. 2c; bu. bxs. 1c. JOHN M. PIGG.				
PEARS—Jefferson 30¢ per peck box.				
WHORTLEBERRIES—Arkansas sold at \$2@2.50 per 6-gal. case.				
WATERMELONS—Texas jobbing at \$2@5c per 100 lb.; car lots from \$300 to \$300 per truck.				
CORN—Cash Market—Firm, but no higher, as demand very light; so was the supply on sale. By sample, del. No. 2 sold at \$3c@4c; No. 3 at 4c; No. 2 white held at \$4c loaded and \$4c per bushel for No. 3 white sold at \$4c; No. 3 white at 30¢@3c; No. 2 white at 29¢@3c, mainly latter.				
RYE—Lower to sell and very dull. Grade No. 2 quotable above 4c.				
MILLEFEED—Steady. Offerings small, as local mills output small, not having been able to make their usual July shipment sales, but demand limited. Skd. bran available at \$6c in large and \$6c in small skds., and bulk at 7c; at mill bran sells at \$6c@7c.				
HAY—Current rates on trk.: Indiana \$14@15c for choice; \$12@13 for No. 1; \$12@12 for No. 2; \$9@10 for No. 3; prairie, \$11@12 for No. 1; \$8@9 for No. 2; \$8@9.50 for No. 3. Clover, \$10@12.				
PRICES ON CHANGE.				
The following tables show the range of prices in future and cash grains:				
Closed Saturday.	Range Monday.	Closed Monday.	Range Last Yr.	
Wheat—				
No. 3 red... .67	66	65	67	87@69... .67
No. 3 red... .66	65	66	65	86@68... .66
No. 4 winter... .69	68	67	69	71@70... .68
No. 2 hard... .66	65	67	65	68@67... .66
No. 3 hard... .64	63	65	65	78@75... .64
Corn—				
July... .42%	41%	43%	42%	42%
Sept... .43%	44%	43%	43%	43%
Oats—				
July... .27@27%	30@29%	26@27%	26@27%	26@27%
Sept... .29%	28@29%	26@27%	26@27%	26@27%
Cash wheat, corn and oats ranged:	Range Monday.	Range Saturday.	Range Last Yr.	
Wheat—				
No. 3 red... .67	66	65	67	87@69... .67
No. 3 red... .66	65	66	65	86@68... .66
No. 4 winter... .69	68	67	69	71@70... .68
No. 2 hard... .66	65	67	65	68@67... .66
No. 3 hard... .64	63	65	65	78@75... .64
Corn—				
July... .42@43%	43@44%	42@43%	42@43%	42@43%
No. 3... .42@43%	43@44%	42@43%	42@43%	42@43%
No. 2 white... .45	45@46%	44@45%	44@45%	44@45%
No. 3 white... .44	44@45%	44@45%	44@45%	44@45%
Oats—				
July... .29@30%	30@31%	29@30%	29@30%	29@30%
No. 2 north... .29@30%	30@31%	29@30%	29@30%	29@30%
No. 2 white... .31@32%	32@33%	27@28%	27@28%	27@28%
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